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The sexually abused battered child

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Abstract

A total of 130 children were identified in whom both evidence of sexual abuse and non-accidental, non-genital physical injuries (bruises, fractures, scratches, burns and scalds, including failure to thrive) were found. There were 77 girls and 53 boys with mean ages 5·7 and 6·8 years respectively and the peak age between the second and seventh birthdays; this reflects previous reports indicating that physical and sexual abuse predominantly involves young children.

Patterns of injury that suggested sexually motivated assault included bruises, scratches, and burns around the lower trunk and genitalia, thighs, buttocks, and upper legs including knees. Pinch and grip marks were found where the child was held. The sexual abuse often involved attempted or achieved penetration of mouth, vagina, or anus, and physical signs were seen relatively more often than in sexually abused children as a whole. Four children died and sexual aggression and child death in the domestic setting may be linked. One in six of 769 physically abused children (16·9%) and one in seven of 949 sexually abused children (13·6%) have suffered both forms of abuse.

Non-accidental injury in the form of bruises, bites, burns, lacerations, fractures, and head injuries as well as other characteristic patterns of injury such as subdural haematoma and retinal haemorrhage, has been increasingly recognised over the past 30 years since first reaching professional attention. In the original descriptions of battered children no mention was made of findings that would indicate that there had also been sexual abuse.[1 2] With the recent awareness of child sexual abuse on both sides of the Atlantic has come an appreciation that physical and sexual abuse can coexist.[3]

One of the first attempts to examine a series of sexually abused children in the United Kingdom found that in 15% of sexually abused children there was evidence of physical injury and in 7% there was a history of previous injury.[4] In an earlier publication we described our finding that one in 10 of 337 sexually abused children had presented to us after physical abuse.[5] Since then our experience of both physical and sexual abuse has increased and the presence of an overlap between these forms of abuse has become clear. We therefore decided to review our experience over the four years in which increasing numbers of sexually abused children have come to our attention.

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Children studied

In the four years 1985–8 inclusive we diagnosed physical abuse in 769 children and sexual abuse in 949 children. These totals included 130 children in whom both physical and sexual abuse was diagnosed. Details of the number of children in each year are to be found in table 1. These 1588 children represented 55% of 2883 children referred with suspected child abuse or neglect over the four years to paediatricians in Leeds, an industrial city with a population of 750 000. In the latter half of 1988 additional numbers of paediatricians in the two major hospitals in the city became involved in seeing abused children and most of these children are included in the data.

Details of this larger group will be provided elsewhere in due course. Of the 130 physically and sexually abused children, there were 77 girls (mean age 5·7 years) and 53 boys (mean age 6·8 years). Sixty four (49%) of the children were aged less than 5 years (41 (31%) girls, 23 (18%) boys), 47 (36%) were 5–10 years (27 (21%) girls, 20 (15%) boys), 18 (14%) were 10–15 years (eight (6%) girls, 10 (8%) boys), and one girl was aged over 15 (fig 1).

Table 1 Numbers of physically and sexually abused children by year of diagnosis

Year	*Non-accidental injury*	*Sexual abuse*	*Non-accidental injury and sexual abuse*
1985	182	100	13
1986	207	237	35
1987	207	333	40
1988	173	279	42
Totals	769	949	130

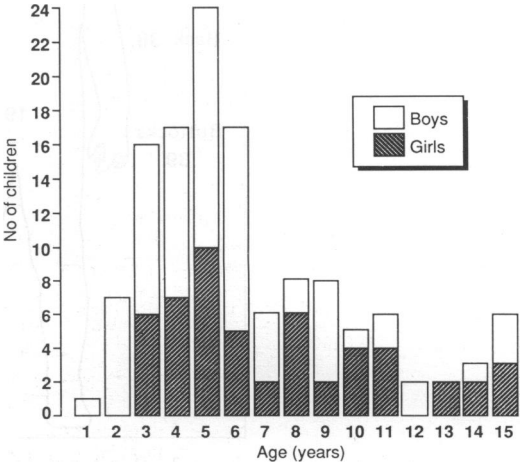

Figure 1 Physically and sexually abused children by age and gender at the times of diagnosis.

The children presented differently and in three main ways. In 72 the child was referred because of physical injury, and evidence of sexual abuse was found from the history and examination. In 43 referral was prompted because of suspicion of sexual abuse, usually because of a disclosure or symptoms which might suggest sexual abuse (for example, recurrent vulval soreness, wetting, soiling, or inappropriate sexual behaviour). In these 43 children evidence of non-accidental injury was found when the child was fully examined. In a further 12 children physical and sexual abuse were diagnosed on separate occasions, which we were aware of at the time of seeing the child.

It was not part of this study to make detailed or exhaustive searches to see whether other incidents of physical or sexual abuse had been recorded elsewhere, possibly by other agencies. It is possible, therefore, that this figure underestimates the true frequency of non-concurrent physical and sexual abuse. In three children it was not possible to classify from the records what had been the mode of presentation.

Types of physical injury

Six children had fractures, including two with more than one fracture. These affected clavicle, skull, ribs, tibia, and femur. A total of 110 children had bruises: 70 had fewer than 10 bruises, 23 between 10 and 20, six between 20 and 30, and 11 over 30 in total number. Figure 2 shows the distribution of various sites in the children where bruises were found.

Bruising in sites commonly associated with non-accidental injury—notably the head, neck, and face—was also found in these children but sites close to the genitalia included the thigh (n=71), paragenital (n=7), abdomen (n=19), and buttocks in 39 children. Bruising around the knees was noted in 33.

Bites were found in two children. Scratches, another common injury in these children, were noted in 38. Burns or scalds were present in 22. There were usually poorly or inadequately explained and of varying ages, including scars. Many were small and only detected after careful examination and questioning about suspicious lesions or scars. The sites were hand (n=7), thigh (n=4), genital/groin (n=4), leg (n=4), buttocks (n=2), arm (n=2), foot (n=2), and abdomen (n=1). It was not always possible to ascertain the cause of the burn, especially where it was old or healing. In these children cigarettes were involved.

Evidence of failure to thrive, as judged by weight below third percentile for age without the presence of organic disease, was found in nine children.

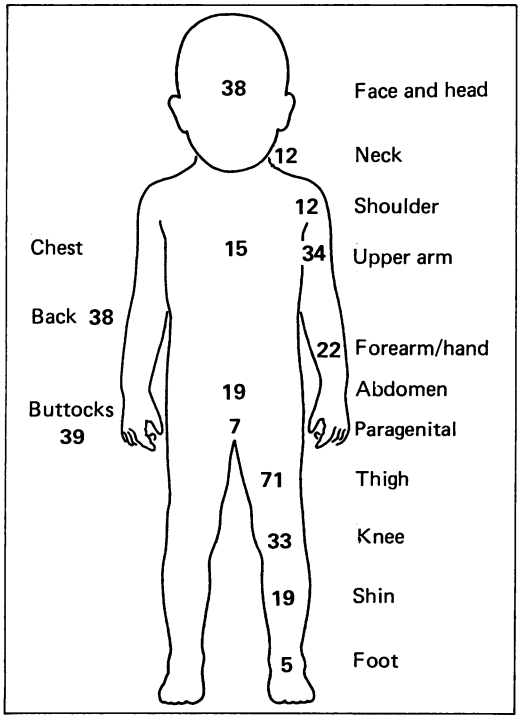

Figure 2 Distribution of bruises by site in 110 physically and sexually abused children. Figures refer to number of children.

Evidence of sexual abuse

In 70 children there was a disclosure: partial in 29 and full in 41. We considered that a partial disclosure had been made when, as in the case of a 4 year old who had been hit across the face by his mother causing bruising, the child had been exhibiting sexually inappropriate behaviour in nursery, putting his penis between little girls' legs and kissing them in the vulval area. When asked the child said 'mummy does it'.

Historical evidence of oral sex was discovered in six children. Genital or anal physical signs seen in association with sexual abuse were present in 70 girls and 48 boys. In the girls, 59 had genital abnormality, 48 anal abnormality, and 37 both.

Abusers

In 1985 and 1986 detailed information was available on abusers from the investigation of police officers and social workers. Convictions were obtained in relation to 25% of children reported elsewhere.[6] With the changing climate of opinion in the United Kingdom which took place in 1987/8, fewer convictions were obtained and the identity of the abuser was more effectively hidden. We therefore did not attempt to analyse figures over this period.

Data are presented, therefore, in relation to the 48 children in the two years 1985 and 1986. There were 53 abusers involved in the sexual abuse, and where the physical abuse was perpetrated by a separate individual, this has not been included. Thirty seven abusers were in the position of male parent figure, including natural father (n=21), cohabiting unrelated boyfriend (n=9), stepfather (n=6), and foster father (n=1). Mothers abused in five cases, sometimes with father and sometimes alone. Other abusers were: brother (n=3), family friend/neighbour (n=3), lodger (n=1), cousin (n=1), babysitter (n=1), and in two cases the identity was unknown.

Table 2 Fatal physical and sexual abuse

Case	*Sex*	*Age (years)*	*Details*
A	F	13·8	Abused by stepfather, including aggressive sadistic abuse. Anal and vaginal abuse. Death from strangulation. Mother also murdered and stepfather committed suicide.
B	F	1·2	Allegedly drowned in bath incident. Dry hair, circumoral petechiae. Failed to thrive with entry of stepfather into family. Old unpresented fractured femur, grip mark bruises to knee. Grossly dilated anus. Previous suspicious burn in sibling. Siblings disclosed oral/anal abuse by stepfather.
C	M	3·9	Multiple bruises to face, head, neck, back, retinal haemorrhages and subarachnoid haemorrhage after violent shaking. His anus showed dilatation and tears which were later confirmed at postmortem examination. Cohabiting boyfriend was the abuser.
D	F	0·4	Multiple bruises including pinch marks over chest. Torn frenulum, retinal haemorrhages. Fractures skull and ribs. Labial fusion, multiple superficial anal tears with gross anal dilatation. Handicapped sibling had gross anal signs that resolved. Father admitted to physical but not sexual abuse.

Deaths

Four children died as the result of abuse. They ranged in age from 5 months to 13 years.

In the oldest child, the likelihood that she was being sexually abused had been recognised before her death and attempts had been made to separate her from her stepfather. Unknown to the professional agencies involved, she returned to the family home where she was again sexually assaulted and both she and her mother murdered by the stepfather, who then committed suicide.

Table 2 demonstrates further details of these cases.

Patterns of injury seen in physical and sexual abuse

CASE HISTORIES

Case 1

A 9 year old boy was referred by social services because of bruising to his face. He was short (height and weight 3rd centile). There were 30–40 bruises over face including eye, chin, jaw, fingertip bruising to top of right shoulder, a chain mark on wrist, and bruises to upper arms and back, chest, and thigh. His anus showed gross dilatation, loss of folds, and smooth thickened skin. After several months in a child protective environment he disclosed buggery by mother's cohabiting boyfriend, later retracting this and naming a neighbour.

Case 2

A boy of 2·5 years had suffered a previous incident of non-accidental injury and was being closely supervised by social service workers. He was brought to hospital with extensive subgaleal haemorrhage and numerous bruises over his face and trunk including fingertip pattern over the lower back. In addition a recent burn on his scrotum was noted and 'kissing' burns on the medial side of either buttock close to his anus, which showed recent abrasions, a recent fissure, dilatation, and discharge secondary to proctitis. There were other burns on the posterior and lateral aspects of his thighs, ankles, foot, and neck, as well as petechial bruising to the dorsum of his penis.

Case 3

A 6 year old girl was referred to her family doctor by her grandmother, who had care at weekends, when she noted bruising to the child's face. There was bruising to her ear and cheek consistent with a hand slap. The child said 'mummy hit me because daddy came into my bedroom again'. She disclosed to the doctor that he had laid on top of her and touched her on her 'tuppence' (vulva) and rubbed 'it' (penis) on her. Hymenal tears were present.

Case 4

A 4 year old presented with a large bruise over the symphysis pubis. The history was of an unwitnessed kick in a playground, but previous physical abuse to a brother and the father's (who was in his 30s) suspected cohabitation with a 13 year old girl who had adopted the mother role in the family caused concern.

Two years later the child was raped. A previously dilated hymenal orifice and posterior vaginal wall tear which required sutures were found. There was bruising to symphysis pubis, outer thigh (pinch configuration), grip marks around knee, and a large bruise to inner upper thigh. The 13 year old girl's 18 year old brother admitted to the rape.

Case 5

A 6 year old boy had been persistently behaving in sexually inappropriate ways toward a female home care worker and was referred to a child psychiatrist. During play sessions he started to disclose that his mother, who was the sole parent, had been inserting her fingers into his bottom and hurting him. On examination he had a lax, reddened anus with congested veins and a deep circular and cratered burn on the back of one of his fingers which he said 'mummy did with a cigarette'.

Case 6

A 4·5 year old girl was brought to the accident and emergency department with facial bruising around the eyes, cheek, ear, and jawline after an alleged fall downstairs. The history was accepted and she was allowed home. The next day she returned with severe perineal bleeding from a tear, which extended from posterior vaginal wall across perineum to anterior anal wall. Bruising to her neck, anterior chest, inside upper arm as well as a laceration of her upper lip and fresh fingernail scratches to both lower thighs were additionally noted. The labia majora were bruised and swollen and there was

an anterior perianal haematoma. Her 3 year old sister showed signs of chronic anal abuse and both children had developmental language problems and gross behaviour disturbance. Although the identity of the abuser(s) was never definitely ascertained, both children later made disclosures within a child protective environment out of the family's care.

Discussion

Previous studies have mentioned the association of violent non-genital or anal injury in sexually abused children.[3 4] Our data are consistent with one in six physically abused children also having been sexually abused and one in seven sexually abused children having been physically abused. Physical abuse as a presentation of sexual abuse occurred in one in 10 of our sexually abused children described elsewhere.[5]

Interestingly, the proportion of physically abused children who were also sexually abused appears to have risen from 7·1% in 1985 to 24·2% in 1988, suggesting that a more accurate figure might be greater than one in six as our ability to recognise sexual abuse increases.

In many cases the pattern of physical abuse is indistinguishable from the classical cases described in the literature over many years. In others, the presence of burns, grasp or pinch marks, or scratches around the lower body, genitalia, anus, thighs, knees, or buttocks would make one think of the possibility of a sexual motivation behind the assault.

Although we have not undertaken comparable analyses of injury location, Buchanan found in 251 abused children that the total number of injuries in particular sites were: forehead (n=37), around eyes (n=49), cheeks (n=114), mouth (n=10), lower jaw (n=18), ears (n=49), mastoid (n=11), arms (n=119), hands (n=7), legs (n=82), feet (n=4), chest (n=23), abdomen (n=16), back (n=60), and buttocks (n=52).[6] His analysis included both sexually and non-sexually battered children. In his data a larger number of children have injury to the head and neck and in ours the legs and abdomen are more commonly involved.

Sexual abuse is defined as the involvement of dependent, developmentally immature children and adolescents in sexual activities they do not fully comprehend and are unable to give informed consent to and that violate the social taboos of family roles.[7]

While sexual abuse can undoubtedly occur within the context of a loving and caring relationship, it is the lack of meaningful consent that is central to the exploitation and abuse. Children are unable to consent to activities that they are unable to understand and for which they are developmentally unprepared. Children do not seek out or request or initiate sexual activity, although they may become involved in it as a means of fulfilling their needs for physical affection and contact.

It is the adult who exploits these needs and the child's weaker position for their own sexual gratification. In a sense all sexual abuse is violent because of the differential in size and power between the adult and the child. A young child who experiences a man weighing 70 kg lying on top of her also experiences violence, although there may be no physical injury.

In most cases the adult is able to secure the child's 'cooperation' through threats, games, bribery, or trickery. In other cases, however, actual physical force is used to hold the child, force their legs open, or to stop them screaming. The abuser may also wish to keep the child quiet by threats backed up with physical violence or may punish the child's attempts to disclose. The resistive behaviours that some children develop—for example, soiling and wetting, running away, fire setting, and also the sexually inappropriate behaviour—may be discouraged by punishment or threat.

For some abusers the association of sexual arousal with aggression coupled with the need to maintain the level of arousal through escalating violence, leads to serious injury or to the child's death. Hallmarks of this pattern of abuser are the presence of sadistic premeditated injuries such as burns or scalds, which should provide warnings of serious risk if the child is not immediately protected by physical separation from the abuser.

While public attention has been directed through the media to violent and fatal sexual assault by strangers who abduct the child, it should come as no surprise that similar assaults can also occur in the home by caregivers. We have been told of cases in which the association of sexual abuse and child death within the home has occurred (A Bentovim, personal communication).

The findings in this study indicate that professionals involved in assessing physically abused children must always be aware of the possibility of sexual abuse. While this may be obvious when the injury is in the perineal or genital area, and there are guidelines for assessing which of these injuries may have arisen non-accidentally and which accidentally,[8] when injuries occur elsewhere the association may not be considered. It is important, therefore, that in all cases of suspected physical abuse the physician should undertake a detailed genital and anal inspection and spend time (or arrange for others to do so) exploring with the child the possibility of sexual abuse. It is also important to examine for both physical and sexual abuse,[9] including a full paediatric history and inquiry for symptoms that could be of relevance.

While it is not within the remit of this paper to discuss details of the management of physically and sexually abused children, it is obviously of crucial importance to recognise when there is a sexual element in the abuse as management may be considerably affected. Plans for future treatment and rehabilitation will be influenced by the nature of the abuse the child has suffered. It is likely that the legal consequences will also differ significantly and in this we agree with other authors.[3]

More work is needed by pathologists on the postmortem findings of sexually abused children. Many of the findings that have been described elsewhere are dynamic, functional, and as such not available to the pathologist. We note the caution that must be taken in interpret-

ing postmortem anal dilatation,[10 11] but further studies are urgently needed. In our cases other findings led us to a diagnosis of sexual abuse in these children.

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1 Kempe CH, Sliverman F, Steel BP, Droegemueller W, Silver H. The battered child syndrome. *JAMA* 1962;**191**:17–24.
2 Smith SM, Hanson R. Battered children – a medical and psychological study. *Br Med J* 1974;**iii**:666–8.
3 Reinhardt MA. Sexual abuse of battered young children. *Pediatr Emerg Care* 1987;**3**:36–8.
4 Mrazek PM, Lynch M, Bentovim A. Mrazek PB, Kempe CH, eds. Recognition of child sexual abuse in the United Kingdom. *Recognition of child sexual abuse in the United Kingdom in sexually abused children and their families*. Oxford: Pergamon, 1981:35–49.
5 Hobbs CJ, Wynne JM. Child sexual abuse – an increasing rate of diagnosis. *Lancet* 1987;**ii**:837–41.
6 Buchanan MFG. *Physical abuse of children*. (Videotapes and accompanying booklet.) Leeds: University of Leeds, Audio Visual Service, 1989.
7 Schechter MD, Roberge L. Sexual exploitation. In: Helfer RE, Kempe CH, eds. *Child abuse and neglect; the family and the community*. Cambridge, Massachusetts: Ballinger, 1976.
8 West R, Davies A, Fenton T. Accidental vulval injuries in children. *Br Med J* 1989;**298**:1002–3.
9 Hobbs CJ, Wynne JM. Management of sexual abuse. *Arch Dis Child* 1987;**62**:1182–7.
10 Kirschner RH, Stein RJ. The mistaken diagnosis of child abuse. *Am J Dis Child* 1985;**139**:873–5.
11 Hobbs CJ, Wynne JM. Buggery in childhood – a common syndrome of child abuse. *Lancet* 1986;**ii**:792–6.